



THE JACG NEWSLETTER

JACG

THE JERSEY ATARI COMPUTER GROUP

VOLUME 11 NUMBER 3

BBS : 201-298-0161

MAY 1991

FROM THE EDITOR'S DESK

I think it was last issue or so that Ed Salvesen mentioned he was writing an article because the newsletter was as small as he had ever seen it in his brief membership time. (Of course, I think the month he was talking about was one of those months that Z*Net wasn't available so it wasn't totally our fault.)

Well, Ed, you should be very happy this month. Sure, all our regulars are back as usual; the pres man, both VPs, both PD librarians, as well as regulars Joe Hicswa and Ed himself. But in addition, three other dutiful members chipped in their support. Phil Greenhut pens an informative article and tip about powerstrips, and Tom Graf returns from a six month ocean voyage with a great article about some internal 8-bit workings. And although none of his articles appear in this issue yet, ol' faithful Mark Santora let me know some more of his excellent game reviews are on their way.

And since all this support is the kind of thing that gets my creative juices flowing, I begin a series this month in addition to my other two columns. In a quite expansive undertaking, I'm going to try writing a programming series that will cover hints and tips on programming in ALL major Atari languages.

All that and Z*Net too! So, sit back, enjoy, and thank your fellow members!!

IN THIS ISSUE ...

- 2 Noise from the 16-Bit VP - D. Noyes
- 3 Presidential Ponderings II - J. Kennedy
- 3 8-Bit VP's Report - D. Arlington
- 5 8-Bit PD Librarian's Report - S. Cory
- 6 April Meeting Notes - J. Hicswa
- 7 PowerStrips - P. Greenhut
- 8 Number Storage in the 8-Bits - T. Graf
- 10 ... The Programmer's Workshop - D. Arlington
- 14 ... Age Of Adventure Game Hints - E. Salvesen
- 16 ... 16-Bit PD Librarian's Report - J. Dean

Z * NET SECTION



CALENDAR OF EVENTS

NEXT MEETING:

June 8th, 1991

10:00 AM TO NOON

FLEA MARKET Before Meeting

Noise from the Vice-President 16-bit (ST)

- D. B. Noyes, JACG

The ATARI SAFARI is COMING!

Yes, it's true - next month on the morning of Saturday the eighth of June will be our world famous ATARI SAFARI. Come one, come all, for 8 and 16-bit demonstrations throughout the Bell Labs auditorium. Yours truly will bring in his MEGA-4 ST setup with all the bells and whistles attached. This will include the MEGA-4 ST, 2 printers (NX-1000 dot-matrix, and HP DeskJet 500), 2 external drives (one w/BLITZ cable), modem (Supra 2400), 256K printer buffer, AB and ABCD switches, 2 monitors, Monitor Master, Mouse Master, Astra Drive B (ABC) switch, MEGAFILE-30 hard drive, Tandy power Switching System, Electra-Guard switch system, and all necessary power supplies, power and connecting cables. I'll also probably bring a hernia!

Really folks...get with the program. It's not too late (hopefully even when you receive this JACG NEWSLETTER) for YOU to actively participate in the SAFARI. We need demonstrators (not the "pro" or "anti" type)! Call Dave Arlington for 8-bit, or me for 16 bit, in order for us to coordinate the program. OK?

Thank you BELL LABS

I have registered, and have had approved, auditorium use for the remainder of the 1991 year (2nd Saturday of each month). AT&T has been very generous to our club for many years now, giving us a (cool in the summer and warm in the winter) a spacious and well-equipped meeting place. There have been no incidents to mar our relationship, and I would expect that such a respectful use of the facilities would continue.

GEMINI ENTERPRISES

Did you make use of the half-price sale at GEMINI ENTERPRISES on Ridgedale Ave. in

Morristown (201) 267-0988? I spent as much as I dared! Don't forget that they are open Fridays from 4 to 8 pm, and all day Saturday from 8 am to 4 pm.

On the PD Front

It's been a bit slow this month...I've only got two double-sided disks for John Dean...Dean of the ST Disk Library! I'll be sure to (quickly) run through them at the meeting. Please utilize our well-stocked and reasonably-priced ST Disk Library; not only will you receive excellent value, you'll be making Jack Rutt, our Treasurer, extremely happy, and keep the JACG solvent at the same time.

On the Commercial Front

Some of my most recent acquisitions include the following:

Colossus Chess X by Artworx (supposed to be the best - but they all say that, don't they?)

Xevious by Mindscape (I know, an oldie, but I always wanted it!)

Deluxe Paint by Electronic Arts (Again, supposed to be the best "paint" type program)

Tempus II by the defunct Michtron (a text editor and more.)

Awesome Arcade Action Pack (volume 1) by Arcadia (a 3 for 1: Xenon, Blasterball, and Sidewinder [by the way, Sidewinder will not run on a MEGA-4 ST])

Will I demo any of them? Only if we run out of other folks' demonstrations...speaking of which...where are all of you 16-bitters when it comes to demonstrations? You know who I mean! YOU!

GENERAL FEATURE

PRESIDENTIAL PONDERINGS II

by Joe Kennedy, President, JACG

Reachout America, a great way to call into your favorite BBS at lower costs, brought to you by AT&T. This service is, of course, aimed at voice communications but it would probably be suitable for BBS communications. If it appeals to you, check it out.

Speaking of reaching out I am still capable of being amazed! Here it is one week before the May meeting (apologies to Dave A! for not getting this done sooner) and no one, that's right, NO ONE has called, written, left Email or communicated in any way that they have not received their newsletters for March and April. Gary has been tied up for the last two months due to the nuptials and has only mailed these two issues in the last couple of days. Does anyone read this newsletter? Is anyone out there? Come on folks! Dave works hard on this newsletter each month and NO RESPONSE? Let us know that you're alive!

Apologies to Kris Holtegaard! I promised him a review of DATAGRAF in this newsletter. Don't look for it! It's not here. It's not because the programs isn't any good. On the contrary! It is one of the better programs written for the 8-bit Ataris. I just didn't get it done this month. Sorry Kris. It is a fantastic database.

Are you sitting down? This tidbit comes from Sam Cory. In the latest issue of Electronics Business Magazine guess who's number 60 on the list of the 100 fastest growing companies in America. Yep. You guessed it. APPLE! That's right the company that Jobs and the Woz built are right there at 60 sitting behind Atari who is at 59. Remember though this is the list of "fastest growing" companies. Who has more chance to grow than Atari? Sales dollars are another matter and there

Atari is way behind Apple.

The Safari is coming! Are you demonstrating your favorite use for your Atari? If you don't demo and the person next to you doesn't demo and ..and ..and Well, you get the idea. If you don't do it it won't get done. Call Dave or Dave and let them know you'll be there.

With the foregoing in mind remember that the same thing goes for demos at the monthly meeting. Remember also that anyone can do a demo. It doesn't take any special skills to do a demo. You just need to get up and talk about something you do with you Atari that you enjoy.

Let's sit back now and enjoy the presentation from Kris Holtegaard!

8 - BIT FEATURE

8 - BIT VICE PRESIDENT'S REPORT

by Dave Arlington, 8-bit VP, JACG

Well, today's topic is demos! Let's talk about giving demos and arranging demos, second topic first.

As mentioned here previously, my duty as 8-bit VP is to arrange demos for the meetings. Now, I don't know how previous 8-bit VPs discharged that duty, but I consider myself as a planning freak. It may not always look like it, but I really do try to arrange things and have them ready long before the meeting date. For instance, I already know what you'll be seeing (if all goes well!) for the next three months or so.

The point of mentioning it? Well, I got a call this morning at 7:30AM. (Now, forget the fact that the only person I get up for at 7:30AM on a Saturday morning is Dave Noyes! and this wasn't him!) Anyway, this person left a message with my wife saying that he was doing a demo at the meeting next week (the May meeting).

Now, while I'm always appreciative of offers to do demos any time, please people, ask me first!!!! Never, as long as I'm 8-bit VP, will there be a time when I don't have all the demos locked in stone a week before a meeting. So, please, if you would like to do an 8-bit demo at the meeting, please call me or write me or see me at the meeting first and I will arrange a month and time that is convenient for everyone. (Ummm... That also pertains to you, officers!!) After all, that is my job!

On to more pleasant things, talking about giving demos... I also got a letter this month from Joe Hicswa on giving demos and I'll reprint it here.

April 25th, 1991

Hi!

Some Atari club members need instructions (help) to demo at meetings. Some demos were not appreciated by me. Acoustics, muffled low-voice speakers, some program were too technical, or ran too fast for me to understand them.

My several demo attempts were fiascos; they abashed me. I want to demo but don't want to be embarrassed. Is there a Public Domain disk that will teach me to demo at Atari meetings?

Friendly Yours,
Joe Hicswa

Well, Joe, computers have made our lives a lot easier, this is true. However, there are some things even computers can't help too much with and public speaking happens to be one of those things. But... while we don't have a public domain disk to help on demos, I'll be happy to provide some advice on giving a good demo. And of course, as you say, this advice applies to everyone thinking of doing a demo.

1) Prepare ahead of time. Run through your demo at least once and hopefully more at home and especially

the night before the meeting. Make sure you have all the right disks together, that you know the names of the programs you want to run, and how to operate them. Make sure you have any special equipment you need with you. For instance a special DOS, a joystick, or a language cartridge. Write some notes out so you know what you plan to say ahead of time. I usually use 3x5 cards to jot notes on. What people don't like to see is someone who obviously did no preparation. They don't have the right disks with them, don't know which disk the file is on, don't have a joystick ready when they need one, and so on. A little preparation a couple nights before the demo can do wonders towards a putting on a professional looking demo.

2) Time your talk. You can figure with a two hour meeting, at least one hour is going to be devoted to club news, questions and answers, and door prize drawings. That leaves one hour for the usual 2 8-bit demos and 2 16-bit demos. To fit that in, a demo should run 10-20 minutes tops. If your talk is too long, leave some out and write a supporting article for the newsletter. Don't talk too fast, but when your time is up, even if you're not quite done, wrap it up as best as possible so every speaker can get a chance. Keeping under 20 minutes also keeps the audience's attention from wandering.

3) Finally, be aware of your audience. It is very common for people giving computer demos to speak while they are facing the computer keyboard or the big TV screen instead of the audience. Don't speak while typing. Stop and turn to the audience when speaking. Look for questions but don't stop for them so often that you lose the flow of your speech. Usually, if you've planned your talk as mentioned above, it's better to wait until the end before fielding questions. And lastly, if despite all preparations, your demo begins to go all wrong (and it has happened to every person who has ever done a demo at least once!), recognize the fact, quit while you're

ahead and regroup for another day. One thing audiences really hate is fidgeting around waiting for a demo that just doesn't look like it's going to get off the ground. Some of our most successful demos, on the other hand, have been rescheduled demos that had problems the first time around.

Follow those guidelines and I think anyone can present an exciting and interesting demo.

8 - BIT FEATURE

8 - BIT PD LIBRAIAN'S REPORT

by Sam Cory, 8-bit PD Librarian, JACG

Here we are in May already. Two big months in a row. May with Kris Holtegaard and his new ATARI BASIC program, DATAGRAF, and June with our annual ATARI SAFARI. Both are hard meetings to miss if you are 8-bit. I urge you to not miss either one. I know, I know, vacations are upon us. For that I wish you all one of the best.

Your 8-bit library will not be selling the Kris Holtegaard program "DATAGRAF". WHY? It is fully protected, as you already know if you read my column of APRIL. BRING CASH. Kris will be the main speaker of the day with a complete demo of DATAGRAF. Besides this he has a number of files for sale some which are already in your 8-bit library because of his generosity. He will be glad to talk about them, of course, but your main effort should be to take advantage of this man who is one of the best ATARI information sources we have in the New York metropolitan area. Ask him about hard drives, DOS of any type (especially SPARTA), Basic programming, BBS operation and setup, how to quickly recover a crashed hard drive, how to VCR tape your ATARI output, how to have several files in memory at the same time, how to best use TEXTPRO, also why he likes some files better than others. etc.

Yes, I am relying on Ol Hackers

again for one of the DOM. It's their MARCH/APRIL 1991 newsletter on disk -our JACG#226. It has the usual well done articles. FRONT IS MARCH. REAR IS APRIL. There are three files on this disk I particularly liked. On FRONT and REAR if you press the space bar will come up a well done graphic demo. Watch them and look at the program for programming hints. The third is a long article on the REAR written by Thomas Andrews on "Getting Published". Very revealing, and instructive particularly on copyright.

The second disk of the month is our first BATCH disk -JACG#227. We have a load of untested unexamined files downloaded from BBS such as GENIE, COMPUSERVE, etc. These will be put on both sides to make a nearly full disk without a dos but in DOS 2.0s format. There will be some duplicate files and each disk will probably be a mixed bag. These files range back 4 years. There will be a lot of real good stuff. I am expecting all of them to be public domain. Every file has been put into TEXTPRO and examined for that word copyright. If it says "X" copyrighted routines are part of the file I do not worry about them because in general these are used in public domain files - ACTION for example allows certain of their files to be used in order to run the file. If I slip up, be patient. I will not do that on purpose. I am sure some of them will be older copyrighted files which included that fact in the cover or paper docs. Since these are not available to me, it is too bad. Blame the BBS, and my laziness. If any file fails and you have a solution, let me know and the solution will be printed in the JACG Newsletter with credit to you. Maybe I can get the club to give free DOMs as payment. Your response to this type of disk will determine how many are put out each month. Present plans are for 2 per month at an each preparation cost to me of about 6 hours.

Here I go again. Nothing bad. Just a reminder about yourself. We will have as a speaker this month of May one of

the fastest talking, and thinking speaker. He is well taught in the art of communication and has no fear from you. This puts a burden on you to put in your piece of mind during the question and answer period. Without your cooperation, Kris will have a reduced output. Ask him many questions. PLEASE. Why do I bring this up? One of our members is thinking of doing a demo. We need speakers and persons who will freely demo. Few of you have the nerve to do it. I am sure none of you purposely demean any speaker. I hope you will make every speaker feel wanted by your pleasant, and friendly questions both during and after the meeting. Put yourself in their shoes. What response would you want to your demo? WHEN ARE YOU GOING TO GIVE ONE?!

GENERAL FEATURE

APRIL MEETING NOTES

by Joseph E. Hicswa - JACG

Only 30 to 40 members attended our April 13 meeting, perhaps because weather was nippy and clouded gray. It took almost the whole session for a chill in me to fade away after my motorcycle ride from Passaic that day.

One flea market table had a complete ATARI system: 800 computer, 1050 drive, 1027 printer and software for \$200. Some happy member got a 520 ST with monitor, two 3.5 drives and software for \$300. Also for sale were many manuals and software for 8 and 16 bitters.

Disk librarians peddled their wares. For 2\$ I got the last 8-bit DOM #225, a "brilliant program" by Jim Morlock containing Federal and New Jersey Tax Guides for SYNCALC (TM)--just in time for April 15 deadline. Perhaps with some alteration it can be used next year.

During Question/Answer a member asked how to dump a screen to his 24-pin printer. Use "24-DUMP", a file in our 16-bit library. Someone also

learned how to download JACG BBS files into IBM. "How do I get a series of text files to print from a disk without having to chain each file?". (FIRST XLENT WP allows, prints a BATCH FILE of text filenames without chaining each one).

Fex:D:FILENAME.1
Fex:D:FILENAME.2
Fex:D:FILENAME.3
Fex:D:FILENAME.4
ETC.

Another problem was with SYNCALC. After formatting columns of figures and saving it to disk, the columns would not line up when file was later reLOAded. (Has anyone solved that problem?). Someone needed help with COMPUTEREYES FOR ST. He got it.

President Joe Kennedy iterated that pioneer 8-bit programmer and charter member of famed "OLD HACKER's GROUP", Mr. Kris Holtegard will be at our May meeting to demonstrate his latest program DATAGRAF. Mr. Holtegard translates machine code into BASIC so it runs faster like WOW! (NOTE: I sent notices about this to four local newspapers and invited readers to be my guests in May).

President Kennedy reminded us of our JUNE ATARI SAFARI. There is room for more demos. Most of us have a program we believe is one of the greatest. Show it at June meeting. Notify an officer. See list on back page. (Safari demonstrators must use their own system. Electric outlets are available).

16 BIT V.P. Dave Noyes described files on the 16-bit Disk of the Month (DOM). Dave announced that GEMINI in Morristown is having a half-price sale on ATARI software. Hours are 4 p.m. to 8 p.m. Fridays and 8 a.m. to 4 p.m. Saturdays. (NOTE: SOFTWARE SPECTRUM also offers discounts to JACG members. Bring membership card or your newsletter. See their ad for address).

Finance Director Jack Rutt again

gave us a favorable report and was thanked with a rousing hand of appreciation.

16-BIT LIBRARIAN John Dean told us a library disk lists 20 pages of programs: games, utilities and applications. The library now has a Public Domain "C LANGUAGE" program. Mr. Dean reminded us to notify him about any library disk that does not run properly. He attends meetings. His address is on back page. John announced that a new GEM TOS will be in ATARI models upgrading the 1040. Also, ATARIs are now produced in Israel.

MEMBERSHIP CHAIRMAN MICHAEL HOCHMAN said membership is now 100.2! "A point 2 member!", gasped some of us, "which part?". Mike explained it was a Trial, not a Full membership, thus does not qualify as a full person on our membership rolls.

The following are NEW & RENEWAL members:

NEW

| | |
|-------------------|------------|
| EDWARD BRESNOWITZ | DENVILLE |
| CHRIS PUZZELE | BELLE MEAD |

RENEWALS

| | |
|----------------|-------------|
| DENNIS BABIEN | BAYONNE |
| LIAM CAREY | LINCROFT |
| JOHN H. DEAN | SUSSEX |
| ROGER H. DIODA | BORDENTOWN |
| ERIC JACOVES | ROCKAWAY |
| ROGER KELLER | SPRINGFIELD |
| DAVID B. NOYES | LONG VALLEY |

The 8-bit demo SOCCER MANAGER was run by Joe Kennedy. It lists teams with rating positions as well as mini-bios of owners, trainers and players. Data may be updated as changes take place. (Ideal for handicappers of soccer games). You also play soccer by strategically positioning your players.

8-BIT V.P. Dave Arlington demo'd ALTERNATE REALTY. You try to safely path through City streets or Underground Dungeons. See 1984 ANTIC review. (Also check for reviews in our

OTHER CLUB NEWSLETTER LIBRARY).

A 16-bit demo by Dave Noyes was an ATARI GDDS RELEASE that contains a Failsafe Crash file. If system crashes, program is not lost. Also it will store up to 6-700 K on a double sided 3.5 disk.

Another file on demo disk translates text files into monotone voice. An ATARI boon for blind computerists. Mr. Noyes also demo'd NOVAGAME a fast action, invader type game donated by Joseph McMahon.

Meeting closed with many door prizes. Lucky me had two tickets: one for attending the meeting, the other for writing a newsletter article. One prize was a battery of cassette tapes: TOUCH TYPING, SPACE CHASE, SPACE INVADERS and JOYSTICK SKETCHPAD. The other prize was XL BOSS that adds RAM into my 1200XL and runs oldie programs without Translator. A bonus disk was enclosed, MACROMON XL--a DOS type utility with macros to easily search ROM & RAM addresses, dump a screen to printer, alternate decimal and hex conversions, find a string in memory, and will extract/alter sectors on a DRIVE #1 DISK.

See you June 8 at our ATARI SAFARI. BRING A STUDENT.

GENERAL FEATURE

POWERSTRIPS

by Phil Greenhut, JACG

One of the handiest inventions of the computer era is the Power Strip. Our use goes way back but we recently bought one that has an On/Off switch and an On/Off light.

We quickly discovered that this one On/Off switch will turn our whole system on and off. No more turning our drive on, our modem on, our computer on, our monitor and finally our printer on. Just use the Power Strip.

We just leave all our component switches in the ON position and then power up by turning the ON switch on the Power Strip or turn off our system by turning off the one switch on our Power Strip.

The On/Off light also allows you to know that the whole system is on or sometimes more importantly, that it is off. No more leaving a drive on for days!

It only took us eight years to find this out so we figured there might be at least one other person out there still turning each component on and off individually.

Use Word Magic it is the best 8-bit Word Processor.

8 - BIT FEATURE

NUMBER STORAGE IN THE ATARI 8-BIT *By T. E. Graf, JACG*

Did you ever wonder how your computer stores and handles numbers? In the 8-bit series of ATARI computers, the 400, 800, XL series and XE series all use the same method. The operating system, which is the program that makes your computer run, utilizes a storage method so that its built-in functions can be used. These functions are used by ATARI BASIC as well as by application programs such as SYNCALC.

These numbers are called "floating point" numbers. Floating point numbers are decimal numbers where the quantity of digits (24 has two digits) remains the same, but the decimal point "floats" back and forth between the digits of the number and determines the magnitude of the number. The number 234000, as we will see, is stored using the same number of digits as the number 2.34.

The operating system stores numbers as 6-byte strings. The first byte contains information as to where the decimal place is set and the sign

of the number (whether it is positive or negative), and is called the "exponent". The remaining 5 bytes contain the digits of the number, and are called the "mantissa". A short BASIC program will show you how the string appears in memory:

```
10 X = 3.1416
20 Y = PEEK(134)+256*PEEK(135)
30 FOR I = 2 TO 7
40 PRINT PEEK(Y+I); " ";
50 NEXT I
```

When you RUN it, you will get the following result:

64 3 20 22 0 0

It looks confusing, but if the numbers are converted to hexadecimal, they begin to look more familiar:

40 03 14 16 00 00

The first byte, the exponent, raises 100 to the power contained in this byte. In order to provide for a complete range of exponents, positive, zero, and negative, 64 (\$40), is the zero point (Note that preceding the number with a "\$" indicates a hexadecimal number. For example, if the exponent was \$42, 100 would be raised to the second power (\$42-\$40 = \$2), giving 100^2 or 10,000. In this case, the exponent is decimal \$40, which gives a zero exponent. Raising 100 to the zero power gives the result of 1. Exponents of less than decimal 64 give numbers between zero and 1. An exponent of \$3E (62) gives a number of 100 raised to the -2 power (62 - 64 = -2), or .0001. The result of this exponentiation is multiplied by the mantissa to arrive at the final number. In this manner very large and very small numbers can be stored.

There is more information contained in this first byte, but more on that later.

The remaining five bytes contain the mantissa, or digits of the number. Each byte contains two digits, allowing

up to 10 digits to be stored. The digits are stored in hexadecimal format, which explains why the PEEKs of the example had to be converted from decimal to hexadecimal in order to be understood. It is assumed that a decimal point occurs between the first and second byte of this 5 byte string in order to interpret this number correctly. This assumption will be made clearer when the example is explained.

Using the example, then, we can see if this all works out. The mantissa is shown as:

03 14 16 00 00

Bearing in mind that a decimal point occurs between the first and second digits and ignoring the zeros, we can write this number as:

3.1416

Returning to the exponent:

40

As \$40 is the "base" exponent, the power that 100 is raised to is \$40-\$40 or 0.

$100^0 = 1$

These two numbers multiplied together give:

$3.1416 \times 1 = 3.1416$.

What happens if the exponent is something other than \$40? Say, for example, the number appears like this:

42 31 41 60 00 00

The mantissa would be:

31.416

The exponent is \$42 - \$40 = \$2, so 100 is raised to the second power, giving result of 10,000.

$31.416 \times 10,000 = 310,416$.

If the number is stored like this:

3E 03 14 16 00 00

the number is this:

$3.1416 \times 100^{-2} = 0.00031416$
(\$3E - \$40 = -\$2)

The last piece of information is the sign of the number which indicates whether it is positive or negative. This is done by "setting the most significant bit". In plain language, it means adding 128 (\$80) to the exponent. (\$80 in binary is 10000000 and the leftmost bit, 1, is the "most significant bit"). Using our example of 3.1416 again, the number is stored like this:

C0 03 14 16 00 00

It is clearer if the exponent byte is converted to decimal. \$C0 is 192 decimal. $192 - 128$ is 64 (\$40), which gives an exponent of 0.

There is a special case for the number zero. For zero, the exponent byte is zero. Under normal conditions (that created by the operating system), the remaining bytes are also zero. Zero appears like this:

00 00 00 00 00 00

At least that is how the available information reads. I found, while experimenting for this article, that if the first byte of the number string is changed to zero, the operating system reads the number and prints it as zero. In other words zero could appear like this:

00 03 14 16 00 00

An undocumented "feature"? Probably. A useful feature? Maybe. I suppose you could use it to zero a large array of numbers quickly by zeroing only the first byte.

What is the point of this exercise? Aside from the obvious

pleasure of understanding a bit more about your computer, it will give you a foundation to build upon if you decide to pursue floating point operations in assembly language or in languages such as ACTION!, which do not have built in features for these operations.

Four books which are useful if you venture in this field (I used them as references to write this article) are:

Mapping the Atari, by Ian Chadwick, Compute! Publications, Inc., 1985.

ATARI Home Computer System Technical Reference Notes, ATARI, Inc., 1982.

De Re Atari, Atari Program Exchange, 1982.

Atari Basic Source Book, by Bill Wilkinson, Kathleen O'Brien, and Paul Laughton, Compute! Publications, Inc., 1983.

8 - BIT FEATURE

THE PROGRAMMER'S WORKSHOP by Dave Arlington, JACG

It's true folks. Programmer have become sexy. Sure there used to be a day when programmers were viewed as faceless entities huddled in a basement over an Atari computer. Nowadays though, are there any active 8-bit users who are not familiar with names such as Roy Goldman (Daisy Dot), Ron Riche (TextPro), Bob Puff (BobTerm), and our guest for the May meeting, Kris Holtegaard. I think this sudden surge in popularity for programmers has to do with the fact that these fine folks are viewed (and rightly so) as the last remaining lifeline for the 8-bit line of computers.

But hey, why let them have all the fun? This column is the start of a series aimed at intermediate level programming types (or those who want to become so) to teach all those neat tricks that all the pros know how to do. Originally, I had done a tutorial

for Action!, and while it was well recieved outside our group, there didn't seem to be enough people interested in Action! in the JACG to attempt to start it up again.

So, this time around, this column will attempt to cover ALL the major ATARI languages I can think of. For me, this means BASIC, Action!, PASCAL, C, LOGO, and even some Assembly Language. (Sorry to all you diehard PILOT programmers out there!) For example, this column has demos in four different languages. Also, I will try not to 'chapter'-ize this series like the Action! tutorial. That way, if you miss an issue of the newsletter or come in late, you won't be totally lost. Each entry will be more of a stand-alone module.

So, before we start, let's cover a few ground rules. First, you should get a minimum set of necessary tools. The things you should have in your possession by next month (and should be part of any serious programmer's toolbox) is the following:

A calculator that has hexadecimal numbers. They are pretty cheap these days and as you'll find out why next month, very, very handy to have. I'll explain more next month, but try to get your hands on one.

A few good Atari reference books. The more, the better and the ones Tom Graf suggests above are an excellent start. At a very minimum, get a good memory map book like Mapping The Atari.

And of course, your favorite language. One word of caution. I am reluctantly including BASIC so as to reach the widest audience, but I do have my standards! For that reason, I will be using Turbo BASIC, the public domain BASIC from Germany that is easily available from our club library. You can try following along with Atari BASIC, but I can guarantee you'll have a very hard time converting from the things we can do in Turbo BASIC to Atari BASIC. So please, if you don't

already have a copy, get a copy of Turbo BASIC from the club. You'll end up thanking me! (Oh, and if you're using something like BASIC XL or BASIC XE, you should be all right with those for the things we'll do.)

The other languages I'll be using for this column are Action!, Lightspeed C for the C programs, Kyan PASCAL for the PASCAL programs, Atari LOGO for the LOGO programs, and MAC/65 for the Assembly Language listings. I know the public domain ACE C is an OK substitute for LightSpeed C, and you can probably get by with the Atari Assembler/Editor cart instead of MAC/65. There is a public domain PASCAL, Draper PASCAL, but as I've never seen it, I can't vouch for how compatible it is with Kyan PASCAL. (This, of course, does not mean you have to worry about any more than one language, **YOUR** favorite. Just look for those listings and ignore all the other languages unless you want to learn something about how those languages work.

As far as the level of expertise I expect you to have to make good use of this column, it goes like this: Action! programmers should have read the first five parts of my previous tutorials and feel comfortable with that stuff. BASIC programmers should know how to do IF-THENS, FOR-NEXT loops, GOTOs, and GOSUBs. C and PASCAL folks should know the similar things (and also WHILEs and REPEAT-UNTILs), but I understand that some of you are not that familiar with these languages and I hope you'll be able to learn something about them by comparing them to the one(s) you know. I'm mostly presenting LOGO for instructional purposes and to prove it is a very useful language, so if any LOGO programmers really exist out there, please let me know!

So, you have a month to pick up a calculator, a reference book, and a copy of Turbo BASIC if you need one. And I'll see you next month! What's that? Did I mention demo programs above? Oh yeah, sorry, there is one thing I want to talk about before I

wrap up; something that is left over from the Action! tutorials.

I got some nice comments from across the country on the Action! tutorials, but a couple of knowledgeable Atari users told me I had made a mistake in one of the parts where I was comparing Action! to C. I had mentioned that Action! was not a recursive language like C or PASCAL and a couple readers pointed out to me that this was not true, that Action! could indeed handle recursion. Well, they seemed to know their stuff, so I gave it another look.

The conclusion? I guess it depends how you define recursion. If you define recursion simply as a language having the capability of calling a procedure, function, or subroutine from within the procedure or function itself, then yes, I guess Action! is recursive. However, I think you have to have a little stricter definition of recursion than that. Using the definition above, **ALL** Atari languages that I know of are recursive and the term really doesn't mean anything any more. So, I claim that Action! is **NOT** recursive for reasons I'll show in a couple of paragraphs from now.

First though, I need to have a little discussion of global and local variables; what that means, what they are, and how they are used. Let's say you start a programming club and one day you read a great book on Atari computers, De Re Atari. You think this book is so good, you think everyone in the club should use this book. Now, if there is only one copy of this book for the entire club, then whatever one person does to the book affects everyone in the club. If Joe K. writes in the margins, and Sam C. cuts out some pages, and Dave N. spills coffee all over it, everyone in the club has to live with those written on, coffee stained, cut out pages.

This is the concept of global variables. These are the only kind of variables that BASIC has. For instance,

if you declare a variable BOOK in your BASIC program, then if it gets changed somewhere in the program, regardless of which subroutine or part of the main program it gets changed in, it takes effect in the whole program. There is only one copy of the BOOK variable existing in the program at any time.

Now let's go back to our programming club analogy and say that instead of having one book for the entire club, everybody in the club gets their own copy of De Re Atari. Now it doesn't matter if Joe K. writes in the margins of his book, and Sam C. cuts out pages of his book, none of that affects YOUR copy of De Re Atari. You still have all the pages in your copy with no writing on them.

This is the concept of local variables. BASIC doesn't have them, but Action!, C, PASCAL, and LOGO all have them. You can pass variables to a procedure or function and have the procedures or functions use their own private copies of the variable you passed, just like each club member had their own private copy of De Re Atari. Look at the first demo program below:

EXAMPLE 1

```
PROC Test2(BYTE num)
```

```
    num==+5
    PrintBE(num)
RETURN
```

```
PROC Test1(BYTE num)
```

```
    num==+5
    PrintBE(num)
    Test2(num)
    PrintBE(num)
RETURN
```

```
PROC main()
```

```
BYTE num
```

```
    num=5
    PrintBE(num)
    Test1(num)
    PrintBE(num)
```

RETURN

OK, here's the blow by blow. In the main program, the variable *num* is declared and given the value of 5 which we print. We then call the Test1 procedure which gets its own local copy of *num* which it adds 5 to to get 10, which we print. Then it calls the Test2 procedure which gets its own local copy of *num* and also adds 5 to it to get 15 which we print again and the RETURN. Now we're back in the Test1 procedure, but remember, it's copy of *num* like Test2's is local and not affected by what happens in the Test2 procedure. So when we print it out again in Test1 after Test2 ends, it still has the value of 10. And likewise, when Test1 ends and we get back to the main program, the main program's copy of *num* is unaffected by what happened in the two Test procedures and still has the value of 5 as you'll see if you compile the program and run it.

Now let's combine what we just learned about global and local variables with recursion (procedures of functions calling themselves). The following 4 programs all look alike and are supposed to do the same thing. Basically, they take a number and count up to it. For instance, if you do COUNTDOWN 5 in LOGO, you will see the numbers 1 through 5 printed on the screen in order. Now, I did say they're *supposed* to all do the same thing. One does not. First, the examples:

EXAMPLE 2 - LOGO

```
TO COUNTUP :NUM
IF :NUM > 1 [COUNTUP :NUM - 1]
PRINT :NUM
END
```

EXAMPLE 3 - PASCAL

```
PROGRAM Demo(Input,Output);

PROCEDURE Countup(num:Integer);

BEGIN
    IF num > 1 THEN Countup(num - 1);
```



```

    Writeln(num);
END;

BEGIN
    Countup(3)
END.

```

EXAMPLE 4 - C

```

countup(num)
int num;
$(
    if(num > 1)
        countup(num - 1);
    printf("%d\n", num);
$)

main()
$(
    countup(3);
$)

```

EXAMPLE 5 - Action!

```

PROC countup(BYTE num)

    IF num > 1 THEN
        countup(num - 1)
    FI
    PrintBE(num)
RETURN

main()

    countup(3)
RETURN

```

Now, you can probably guess by now, it is the Action! version that does not work like it should. Why not? Well, first, how does the program work? Like our other example, when the program first starts *countup* is called with a value of 3, and it keeps a local copy of that variable handy. It checks and sees that *num* is greater than one, so it calls the countdown procedure from within itself with the value of *num - 1* (or 2). *countup(2)* calls yet another *countup* procedure (since 2 is still greater than one). So, by now, we have three versions of the same function running at the same time and they all have their own local copies of the *num* variable. *countup(1)* finally

is not greater than 1, so it prints 1 and then ends. Back to *countup(2)* which prints the value of its local *num* variable which is still 2 and it ends. And so on.

Well, the key as to why this works OK in C, PASCAL, and LOGO but not in Action! has to do with how these languages handle local variables. In C, PASCAL, and LOGO, when a new procedure is called while another is still running, the value of local variables are stored temporarily in a special place in memory called the stack (which we'll discuss in detail in a later column). Then when they are needed again, they are pulled out of memory with their original values intact. So, in these languages, if three versions of *countup* are running all at the same time, their local variables all have three different places in memory where they are stored where they won't affect each other.

Action!, however, doesn't play by these rules. When you compile any procedure, in this case *countup*, it only sets aside ONE place in memory for each of its local variables. So, no matter when or where you call the *countup* procedure, the local variable always get stored in the same place. Action! doesn't take recursion into account in this scheme. For instance, in the example program, when you call *countup(2)* from *countup(3)*, the 2 gets stored in the same place where the 3 used to be! Likewise, *countup(1)* overwrites the 2 with a 1. So when *countup(1)* ends and we go back to *countup(2)*, it looks in the local variable storage place and sees a 1! So instead of counting up to 3 like the other three versions, Action! just prints three 1s.

So that's why I claim Action! is not a recursive language. You can't have your cake and eat it too. If you have a language that wants to have local variables AND recursion, that recursion isn't any good if it doesn't keep the values of local variables intact after it is done. Note that

BASIC doesn't get involved in this discussion since it does not have local variables at all.

Now, to get you in the spirit of this column, here's a challenge for next month. Write a COUNTUP PROCEDURE in either TURBO BASIC or Action! that *simulates* local variables. You'll need a place in memory to store your local variables and some sort of pointer to know which local variable you want to access when. HINT: Page 6 (locations 1536 and on) is a good place for BASIC to use. In Action!, I'd think about an array to hold them.

Answers to the challenge will appear next month along with the friendliest guide to (please don't run away until you've read it!) hexadecimal numbers you'll ever see. And I promise to someday talk about just where Action! does store those local variables and how you can use it to your advantage. 'Til next month!

8 - BIT FEATURE

AGE OF ADVENTURE GAME HINTS

by Ed Salvesen, JACG

Electronic Arts and author Stuart Smith brought Age of Adventure to the Atari market in 1986 with a new angle to text type adventures and a bonus second (though similar) game on the disk's flip side. The new angle was graphic interplay with random outcomes. It's now a standard for this type of game as witnessed during an April demo of Alternate Reality.

On side one of the disk is Ali Baba and the Forty Thieves although there are only some 20-odd characters (good guys) from which to draw. The special challenge issued by the accompanying manual is for you to assume the character of Ali Baba and rescue the princess solo without adding any others and without attacking anyone or anything! Unfortunately, playing the game this way removes a vicarious

thrill many people get in killing with impunity (in a fictional scenario, of course!). The challenge is therefore a puzzle: STOP! READ NO FURTHER IF YOU DO NOT WANT THIS PUZZLE EXPLAINED!!! Okay, still with me? Then here we go!

First of all, whenever the option REST appears, you must rest to rebuild your strength, unless, of course, you are under attack. Then, you flee until you find a safe haven in which to rest. I'll be using N (Up), S (Down), W (Left), and E (Right) to relate directions along the way. Remember also, this method is not foolproof. Sometimes, the random generator allows your money to be stolen or the magic pool is not very helpful. Begin by entering page 3 of your control menu. Toggle the danger level to zero (since you can't fight back) and the speed to whatever you want (I chose five because I have already seen everything and it speeds up the game considerably). Now choose MOVE and return to Ali. Begin in Ali's room, exit N to Dusty Road. Then, avoiding the rune, exit SE to the forest. Ali is permitted 8 paces. Hugging the eastern wall, exactly 8 paces away is the upper SE exit. If you blow this, you're tiger lunch!!

If you made it, you're in a tree called View From A Tree. Exit S to Old Mine Road. Spend a turn there by choosing DEFEND. Watch the Calico Rat carefully as it moves your way. If it doesn't get past that NE exit, spend a second turn in the same manner. This pays dividends later! Next, exit N back into Tree and continue N into rune (open sesame) and N again into Thieves Cave where you clean up (5000) and rest up! Next, exit E into Crystal Cave. Unless some of your money was stolen, you don't need more. Exit this cave E to Astrologer's Maze where Omar and Mahmud will kill you in a heartbeat if they get their hands on you! At this point, you should be allotted 3 paces per turn. Take 3 paces East, then 1 S, 1 E, 1 S. You should've confused Omar temporarily. Now, go 2 paces W and 1 pace S. Now, 1 pace back N and you should disappear into a one-way slide

and pick up another 1000 on the way!
(Your monetary goal is 6000.)

As you exit the slide S, you appear in the Minotaur Labyrinth. There are a host of magical occurrences here. You will be forced W toward a rune but you want to walk into the column 3 paces N of the rune! It is an apparition! From there, go 4 paces E, then 3 paces S right into the wall (another apparition), then 3 paces E, 1 S, 1 E, 3 S (knocking out the weak wall and ending up along the S wall). Now, go 5 paces W past the fake cache and you disappear yet again into the underground stream. You go 1 pace E, then another pace E. Behind you appears two wavy lines (like the mathematical symbol for almost equals). Go back W and E, 1 pace at a time, until there is nothing left. Each time you drink from the well, you gain overall stamina (don't forget REST!). A monetary bonus appears after the well dries up but if you have your 6000, you don't need it. Avoid the overpriced merchant there and you must exit SE and reappear in the Minotaur Labyrinth. Get to that spot once again!

Now go to the top of the room right through another of those 'non-walls' and pick up some more money if you need it. After, go E right into the corner where you'll disappear yet again into one of those secret passageways. (This one is called Secret Passageway!) Proceed E exiting into the Inner Staircase. Exit this NE into what's called 'Save The Whales'! Make your way E along the top and then 1 pace S into the merchant's tent. Spend your 6000 for Rithmil Plate Armor. Then hit 'no sale' to get out of there. This lets you withstand more punishment which you're about to suffer! Lose enough leftover money so you're entitled to 8 paces per move, again. Now, exit NW into the Needle Strewn Cell (as in Scorpion Needle). Step 1 pace E, then run straight N into the exit door. Keep at it until you burst through to the Guard Room. Now, you're in for it! Three deadly rats attack you as you must make your way between two

swords guarding the exit. You must withstand all these attacks, including those from the swords if you want to survive.

Exit N into the Gilded Pathway. Then, continue straight N (keeps the dragon dormant) through the false column right into the room called Gemini. Say hello to the Princess and REST for as long as necessary! The trip back is much quicker! Remember now, that the Princess has no armor. She is easily killed! End your turns on the same location as her! Exit Gemini E into the Astrologer's Lab and go N along the West wall right into Taurus in the NW corner. You must survive an attack by Taurus. Get to the N wall and exit W into Old Mine Shaft. When one character reaches the column, there will be a 'cave in'. You must hold back the dirt as the other character gets through. Now, time it so they both exit W into Old Mine Road at the same time. Here's where dekeing that Calico Rat earlier pays off! It can't get to you if you steer both characters through the nearby N exit into the Mountain!

Now, head W (avoiding that rune) and exit W into Foothills Cemetery. This is the last hurdle, but it's tough! If any zombie kills the Princess, all is wasted. Stay with her and take whatever they dish out until the time is ripe for her to break W for the W exit to Dusty Road. Move her to Ali's room which is the more left of the two South exits (even while Ali is still in Foothill). Next is the congratulatory message from the author! Good Luck!!

The game, Return of Heracles, on the flip side of the disk, in my opinion, is the more complex game. It has more characters, based on Classic Greek Mythology, and a scoring system. The author claims to have achieved 'about 9500 points' which means he didn't reach 9500 or he would have said so! He imagines a maximum possibility of about 9650 with 'phenomenal luck'! With my hints next month, you may be able to crack 9700! See you then!

JACGLSEA.225

This is an APPLICATION Disk

ADDLBL3.APP This program runs in HIGH and MEDIUM Resolutions. In MEDIUM Resolution, the Screen colors will change to correspond to Menu changes. The program can be used as a traditional Address Label Printer, or as a Data Base of Names, Addresses, and Phone numbers. The program is set to print on single column standard labels 3-1/2" by 15/16". Four lines are printed on each label as follows:

NAME

STREET ADDRESS

CITY

STATE ZIPCODE

The Data Base contains the ability to SORT Labels, MERGE Files, and COPY Labels. It can PRINT ONE, SOME or ALL of the labels.

CAL31.APP Cal is a calendar program with a difference - it lets you attach 'events' to any day of the year, either by date or according to a day's position in the month. When Cal loads, it reads the current date from your system clock and checks to see if any events are scheduled for the day. If so, Cal displays an alert that shows you the day's events. (When Cal loads as an ACC, it dings the system bell if an event is scheduled.) Also included in this file is CalShow, an AUTO program that will read the events from Cal, display the next 22 events on screen, then pause so you can easily see what's on tap for the next couple weeks. This should give you plenty of time to plan for upcoming events!

PGSFE_08.APP is the long awaited Font Editor for Page Stream. This file contains a .DOC file that is in Page Stream format. So that you can read it, we have included a DEMO (Version 1.52) of Page Stream. The Shareware editing program is also in this file.

PGSTREAM.APP This Demo of Page Stream is complete with Fonts so that you will be able to print out Font Editor Docs in PGSFE_08.APP.

JACGLSEA.226

This is GAME disk

JUMPSTER.APP - is a Qbert clone that runs in low res. What more can I say? If you like Qbert, you'll like JUMPSTER. Low Resolution.

REBUS4.APP Rebus Writer allows the user to design and print rebuses, a kind of code in which pictures and symbols are used to represent words. The HELP files in the program should be

sufficient to get you started. A KIDPRG in GFA Basic by D.A. Brumleve, Copyright 1988. Low Resolution.

RICK.APP This is the demo of the newer version of Rick Dangerous, the 3rd level seemed to prevent many players from progressing further into the game. The senario stays basically the same with the hero, Rick, part-time explorer and stamp collector, searching for the Goolu tribe when he crashed his plane in the Amazon. This demo only contains several screens available to the user but it gives a fair representation on how good the game actually is. When you reach the last screen you will be told the demo is ended and the game will finish, you can still however play the game again.

ROBOKID.APP Another contribution from Joe Roborecky. Transported from Amiga by Rainbow Software, this is an action game. I had trouble with my joystick, but found a combination of mouse and stick worked out O.K. Low Resolution.

JACGLSEA.227

This is an UTILITY disk.

ARCShell1.APP ARC Shell is a GEM program which is designed to work with the popular ST archiving utility ARC.TTP. Essentially, ARC Shell adds a GEM interface to the ARC program, letting you point and click to select the various options instead of typing a command line. Revision dated January, 1990.

BLINK38.APP The Blink Utilities give you quick, easy control over the palettes used in your ST. Rather than using the Control Panel accessory and setting your screen colors one by one, Blink and Palette Switcher let you install an entire custom palette with the click of a mouse. What's more, each uses less than half the memory taken up by the Control Panel. Both Blink and Palette Switcher come with a set of palettes already installed, but in case you want to create your own custom palettes, the BlinkSet accessory and BlinkMgr will let you do so. Blink, BlinkSet, and Palette Switcher will run as either programs or desk accessories by simply renaming the files. They will work in any resolution on any ST. The BlinkMgr Librarian runs as a program in either medium or high resolution.

DCFLIGHT.APP DC FLIGHT installs a routine into the read/write vector (RWABS) of storage devices- floppy disks, hard drives, ram-disks, etc. Each time such a device (all with the exception of the floppy) is accessed, the floppy drive A light will come on until the operation is finished. Now you can monitor the usage of

ramdisks and caches, since, generally, there was no way to know when they were active.

DCMSHIFT.APP includes DC MOUSE SHIFT emulates any of the modifier keys (SHIFTs, CONTROL and/or ALTERNATE) by pressing the RIGHT MOUSE BUTTON. Now, at the desktop you can select multiple files just by keeping the right mouse button pressed while you are selecting (if you select to emulate one of the SHIFT keys). Or, you can MOVE (TOS 1.4 or higher) files by keeping the right mouse button pressed when you drag and release the files (if you select to emulate the CONTROL key).

DCONVERT.APP To make the process of un-ARcing files easier for you, we use Double Click Software's DC SEA program to convert the ARC and LZH files to self-extracting PRG files. This program, DCONVERT.PRG, converts the self-extracting DC SEA file back to its original form, a standard ARC or LZH file. If you run into trouble with some of the JACG ST files, try this out.

DC_SLICK.APP DC Slick Shift will emulate either the RIGHT or LEFT mouse button with the press of either one or two modifier keys (Control, Alternate, Left or Right shift keys). You can have DC SLICK SHIFT emulate either/both the LEFT and RIGHT mouse buttons. To do this, you can use one modifier key (say, ALTERNATE for the LEFT mouse button and/or CONTROL for the RIGHT mouse button) or two modifier keys (such as CONTROL and ALTERNATE for the LEFT mouse button, etc).

FCOPY11.APP FastCopy runs as a program and as an accessory. To start it from the Desktop, call it >FCOPY_11.PRG<. To make TOS recognize it as an accessory call it >FCOPY_11.ACC< and put it on the boot-disk (A: for drives and C: for harddisks). Faster than Light! You find a brief Survey of all functions FastCopy offers you in main menu under >Help<.

GOGOST34.APP GoGo->ST is a replacement for the file selection windows of the normal GEM desktop. With a single click of the mouse you can run a program or load a document into an application without the tedious search through folders and drives. There are a few better known products out on the market today that allow you to quickly find and execute any program on disk, but many people have said that none are as easy as GoGo->ST to learn and use!

HDFREE21.APP HDFree Pro v2.1 is a program that will generate statistics about the amount of space that is available on your hard drive partitions C-P. It presents it's information in a GEM window that grows larger or smaller depending upon the number of partitions available

to the system. By Paul Vermeulen.

LHARC060.APP LHarc can be started from the desktop or from a shell. LHarc knows when it has been started from the desktop. It will allow you to input/edit your command line, and will wait for a keypress when done. If you start LHarc without a command line, it will display a list of commands. LHarc should work fine with a standard ARC-shell. Version 0.60 is between 20 and 35 percent faster than v0.51, depending on whether you work from floppy or from hard disk, and on which TOS version you run. We've done some low level optimising, and v0.60 does file buffering (if RAM permits). DeltaVision Systems, Valerianstraat 197, 3765 EN Soest The Netherlands.

LZH.ARC.PR This is a ready-to-go, uncompressed, very simple and easy to use program. When you load this program a menu is present with all of the commands available. Performs something like DCOPI.

OCULT.L5.APP OCULTAR [o-cool-tar]va. 1. To hide, to conceal, to disguise, to secrete, to mask, to hoodwink, to cloak. 2. To keep back, to keep secret what ought to be said. In other words, this is a password system to keep others from all your computer secrets. Version 1.5 Shareware by Carl J. Hafner.

JACGLSEA.228

This is a UTILITY Disk.

ARCBIT.APP ARCBIT is a utility program that will set or reset the archive bit on all normal files within a user-supplied directory. This allows any backup program that uses the archive bit to skip over or backup the files that the user has flagged with the utility. This is especially useful for that folder nested deep within the backup pathway, full of files that you do not want to backup.

ARCLZH21.APP ARC LZH version 2.0 Start the program by double-clicking on ARC2LZH2.PR. After the ABOUT ME dialog appears, just hit return and you will be presented with the main menu. At the top of the dialog box there is a Title bar. It will have "ARC LZH" in it when you first run the program. By clicking on the bar you can switch between "ARC LZH" to "LZH ARC" and back.

ATTRIBUT.APP To use this program, simply run it from the desktop. To see or change the attributes of any file shown, just point and left click on the filename. Attributes shown are A for archive (used by many backup programs to indicate a current backup), D for directory, L for disk label, H for hidden, S for system and R for read only. By Tom Hayslett.

BAPACK.APP BA Pack is an executable program packer. It takes an existing program, which may have a .PRG, .TOS, .TTP, or .ACC extender, and creates a file which is smaller but still remains executable. This frees up disk space, and allows more programs to fit on a floppy disk or hard disk. Desk accessories as well as normal applications can be packed.

BOOTMNG.APP Bootmanager will provide a unique computing "environment", of your choosing, each time you boot your system. An environment is a collection of desk accessories and/or auto programs that are loaded in at the time you boot your system. You create these environments ahead of time using the Bootmanager configuration program. You may add items to your environments at any time.

DCOPY36.APP DCOPI is a versatile copying, un'ARCIing, ARCIing, text reader - you name it - that has had almost 60 "bugs" fixed or improvements added to it to bring it to version 3.6. Also in this file is Dcopy Shell - a "simple" GEM menu-based program that takes care of input for Dcopy 3.xx while using <10K. All text-based menu selections are found in the GEM menu. To allow compatibility, keystrokes are passed through as normal. Menu selections are substituted by their equivalent keystroke and passed to the program. Accessories are now accessible under the menu bar posing "no" problems within Dcopy - thus adding additional options not allowed before!

DLIL021.APP DL II is a checkdisk/unerase/diskedit program with the following functions: -Disk usage display -Check of FAT integrity -Check for lost and crosslinked clusters -Some disk fix functions -Automatic and manual unerase -File attribute change -Disk editing, file or sector oriented -Editing of harddisk bootsector. DL II is completely GEM based and will run on any Atari-ST model in medium or high resolution. (c) 1987 Simon Poole

FASTBACK.APP Fastback was designed to be a simple way to keep track of last logins; but also implements another useful feature that makes Fastback a useful utility. Fastback will change the desktop.inf file whenever you switch monitors. This is a must for users of two monitors (like myself) who simply hate to have one desktop for both colour and monochrome.

FAST_FMT.APP Kiwi-Net Present The Fast Formatter .ACC It will format a disk in 18 seconds, but the disk should be a new one. This is ideal to have as an ACC as you can run it when you need it...

FONTRIX.APP The program FONTRIX.ACC is out of the January 1987 issue of ST-Log issue

10). If you have any questions about using different types of fonts with it, refer to the article.

LGSELECT.APP The Little Green Selector is a complete replacement for the dreaded GEM item selector. Once it's installed, all programs that call the GEM item selector will end up using the vastly improved Little Green Selector instead. You can install it at bootup time by placing it in an AUTO folder, or run it from the desktop at any time after bootup. The Little Green Selector (henceforth referred to as LGSELECT) optimizes the process of selecting files, with unique features that make this easier than ever before. Shareware by Charles F. Johnson. Version 1.7.

PAN10801U.APP The PAN10801.HEX was originally a HEX file that came with my 1st Word Plus program. But it lacking many of the characters within the font table I choose to rewrite many of the codes and to add the missing codes. With PAN10801HEX you will now be able to use any of the fonts shown in the Font Tables of 1st Word or 1st Word Plus. Don Schmidt (SWAG) P.S. Some of you adventurous might try using the CFG file with those other Word Processors and have the ability to print out 1st Word Plus DOCs as well as your own DOCs. Also, this file will probably work with most Epson 9 pin compatibles.

JACGLSEA.229

This is an UTILITY disk

CALAS.APP The Calendar Program v4.5, is a calendar program with a difference - it lets you attach 'events' to any day of the year, either by date or according to a day's position in the month. Also included in this file is CalShow, an AUTO program that will read the events from Cal.

CHAME117.APP The Chameleon v1.17, is a short ACC (around 5K) that can load every other ACC at runtime, and the loaded ACC can be unloaded at runtime, without rebooting. And its not only the RAM, which is freed, all resources, that been used by the ACC is released too.

FRMDIT11.APP FormDolt v1.1 replaces one part of GEM that has always been in need of improvement: the dialog manager. FormDolt adds a number of features to this all-important aspect of the operating system.

PINHED18.APP PinHead is a small AUTO folder program that drastically reduces the amount of time it takes to boot your computer. This program will also speed up how faster programs load from the GEM Desktop as well. PinHead 1.8 works with all ROM versions of TOS: 1.0, 1.2, 1.4 and 1.6.

Q.TEXT.APP Q.TEXT is a program that optimizes the text bit routines built in to the Atari Mega/ST. After Q.TEXT is installed, screen redraw speed will be significantly improved for any program that uses the text bit routines to output text.

SPRBOOT7.APP The newest version of Superboot (v7.0). Super Boot is one of the best desktop organizer programs available.

It allows you to:

- Choose which Accessories to load - Choose which AUTO programs to run - Choose from a number of DESKTOP.INF files, allowing you to change your resolution, color scheme, etc. on each boot - Choose from a number of ASSIGN.SYS files for GDOS - Choose other data files used by up to 8 different programs

- Display a welcome screen from any picture in Degas, Neochrome, or Tinstuffed format, even on systems with both color and mono monitors, and it can rotate colors on color systems, while playing a digitized sound

[For some sample pictures/sounds, get JACG Disk #230]

- Set the time & date if you so choose
- Choose whether or not Super Boot will run by holding down a "hot-key", by a time delay feature, or by both
- Restrict access to your system by use of a password (mainly useful for hard drive owners)
- Set the floppy disk seek rate
- Have Write Verify turned off if desired
- Select the most used file configurations by simply pressing a function key, with up to 30 function keys supported
- Auto boot any GEM program

Super Boot works on all Atari ST models, from any boot drive, and on both color and monochrome monitors. Super Boot can control up to 151 files at once. And Super Boot supports all versions of TOS including TOS 1.4 and TOS 1.6.

Also included in this file is a new version of StartGem. It is supposed to fix the problems that occurred when using the older version.

SBTUTLS.APP Several Utilities for use with Superboot 7.0, such as Digidit, Picswitch, Autosort, and a new version of ACCESSORY (v1.2). DigiEdit allows you to convert from various digitized sound formats, to Superboot's own unique format. Picswitch allows you to convert between different picture formats, this allows for quite a selection of welcome screens for use with

Superboot. Autosort allows you to resort the order of your files in your AUTO folder. ACCESSORY is an AUTO folder program that enables you to keep all of your many accessories in a folder instead of in your root directory.

WHATIS45.APP WHATIS File Identifier v4.5, is a simple program that will identify 80 different types of files.

JACGLSEA.230

This is an UTILITY disk

DCDESKEY.APP DC DESKEY, a desktop menu selector using keystrokes.

DCDIRDMP.APP DC DirDump v1.0, will alphabetize and dump the listing of the current directory to either the screen, disk or printer.

DCDMASPL.APP DC DMA Sound Player v1.0, allows you to play back "digitized" sound files on the Atari STe or TT computers through the DMA sound circuitry.

DCDSKINF.APP DC DISK INFO v1.0, can be used to give you a quick 'snapshot' of any disk. You will get visual representation of the file allocation on your disk, plus certain statistics about the disk.

DCFLPCFG.APP DC Floppy Configurator v1.0, allows you to logically add or remove floppy disk drives from your system, as well as set the step rate for the drives.

DCINVERT.APP DC Invert v1.0, will flash the screen whenever a BELL character (ASCII 7) is printed. This way, if you have the stereo up, are listening to headphones, or just plain have the sound turned off, you can tell when an alert bell is sounded.

DCLFTARW.APP DC Lefty Arrow v1.0, is a supplement to for use with the DC Lefty program (See JACG Disk #223). DC Lefty Arrow will turn your normal mouse arrow (which points left) to an arrow which points right (for left-handed users).

DCMAXTRK.APP Have you ever wondered how many tracks your floppy disk drive is capable of formatting? (It seems to vary from drive to drive) Well now, wonder no more, DC MAX TRACK v1.0 will tell you how many tracks your floppy disk drive can handle.

DCMSTICK.APP DC Mouse Stick v1.0 allows you to use a joystick to emulate a mouse on your ST, STe or TT computer.

DCSHOHEX.APP DC Show Hex v1.0 lets you view and search data in a file or system memory.

DC.BHELP.APP Ever press the <HELP> key when you really meant to hit the <BACKSPACE>

key? It breaks your whole rhythm. Not any more! DC Backspace Help v1.0 will print a <BACKSPACE> character instead of <HELP> when you press the <HELP> key. Or, press <CONTROL>+<HELP> to get a regular <HELP> key press.

DC.CRC.APP DC CRC v1.0, will compute and record the CRC (ARC type) for any file. DC CRC allows you to add a file and its CRC, or compare a file's CRC with the CRC stored in the CRC master list.

DC.FF.APP DC Form Feed v1.0, is an AUTO folder program that will send a FORM FEED (ASCII 12) to your printer when you press the <ALTERNATE>+<CONTROL>+<F> keys together.

DC.FKEYS.APP DC F-Keys v1.0, allows you to assign a text macro to a function key, or combination of a function key and one modifier key (SHIFT, CONTROL or ALTERNATE). This is useful if you enter the same text repeatedly. For example, you leave an email message and instead of typing your name at the end, you press F1 and your name is printed for you. You can assign up to 49 function key macros!

IDLE.22.APP Idle v2.2 is a GEM-based screen saver and corner clock. Unlike other screen savers, this one will run on any ST with any type of monitor, even a Moniterm, an Image Systems board, or an ST that's had the "overscan" modification.

SBSOUNDS.APP This is a collection of a few welcome screens and digitized sound files, put together by Gordon Moore for use with Superboot 7.0 (see JACG Disk #229)

ST LIBRARY DISKS

New disks are added to the JACG ST disk library every month. If you have a need for something in the PD and/or Shareware world that we do not already have, we will do our best to get it for you.

Disks are available by mail order. The cost is \$5.00 each, which includes mailing cost. Send your order, and check (made out to J.A.C.G.) to:

John H. Dean

RD #2 Box 788

Sussex, NJ 07461



IN THIS ISSUE

Z*Net NewsWire
Professional Systems Group
MEGA STE I Revealed
Atari Financial Statement
Stumpf, Miller Speak
New Atari Plant

May 1991 Volume III Number 5

ATARI SHINES AT CEPS SHOW

by Mike Brown, Z*Net Correspondent

April 8-11th, Chicago's massive McCormick Place exhibition center played host to the best and brightest that Computer-based publishing has to offer in the annual Corporate Electronic Publishing Systems (CEPS) trade show.

Atari chose this exhibition to introduce a whole new division, the Professional Systems Group, and to offer "Direct To Press", a complete and comprehensive array of pre-press publishing solutions. The new division is headed up by Bill Rehbock at Atari and features a powerful alliance of third-party developers. Direct To Press is far more than a bundle of a Atari computer systems with popular page layout programs; it includes tools for every phase of pre-press work, from document processing and design to photo retouching and imagesetter film output.

The "engine" that drives this sophisticated system is the Atari TT030/8 consisting of 8mb of RAM, an 80mb HD, and a TTM194 19" 1280 by 960 monochrome monitor. This powerful computing platform performs at the high level shown at CEPS in concert with an array of very innovative software and hardware developed by Atari's international and domestic business partners.

The Direct to Press solutions generally follow one of three complementary approaches: Soft-Logik's PostScript based PageStream 2, Calamus SL with tms Cranach Studio family of high-end publishing applications (including proprietary SoftRIPs for specific models of typesetters and imagesetters) and the Retouche/Didot family

of digital lithography, line art, and page layout tools (using proprietary software technology to create raster images of pages within the host software, eliminating the need for a raster image processor, and uses specialized hardware to greatly enhance output speed and quality).

In addition to showing the current versions of Calamus, and Calamus Outline Art, ISD Marketing was showing Calamus SL (albeit, with German menus and help text). I was impressed by the color handling capability of SL, especially when shown on the TTC1426 14" color monitor. Users can specify colors either by simple RGB mixing or an external module such as pantone. Calamus SL will create the necessary four films per page for color separations.

Calamus SL's programmers seem to have paid attention to the critics that have said that the Calamus

*Continued on page Z*5...*



ISD booth at CEPS Publishing Show, with Nathan Potechin and Bob Brodie

- Z*Net is a monthly newsletter supplement produced by Rovac Industries, Inc. It is available in newsletters of registered Atari user groups. Z*Net and Rovac Industries, Inc. are not affiliated with Atari Corporation.
- Z*Net articles are Copyright 1991 by the individual authors. Reprint permission is available from Rovac Industries in writing. Opinions and commentary stated within this publication are those of the individual author and not necessarily those of Z*Net or RII. Responses and feature article contributions are encouraged.
- Z*Net is produced on an Atari Mega ST4 using Calamus Desktop Publishing software. This publication was printed on an Atari SLM804 laser printer and reproduced by user groups. Artwork and logos have been produced on the Atari ST using Easy-Draw, Touch-Up, and VIDI-ST Video Digitizer.
- Z*Net, Z*Net Logo, Z*Net Online, and RII are Copyright 1989-1991 by Rovac Industries, Inc., Middlesex, NJ, a registered corporation. Voice line: (908) 968-2024. Advertising: John King Tarpinian - (818) 246-7286.

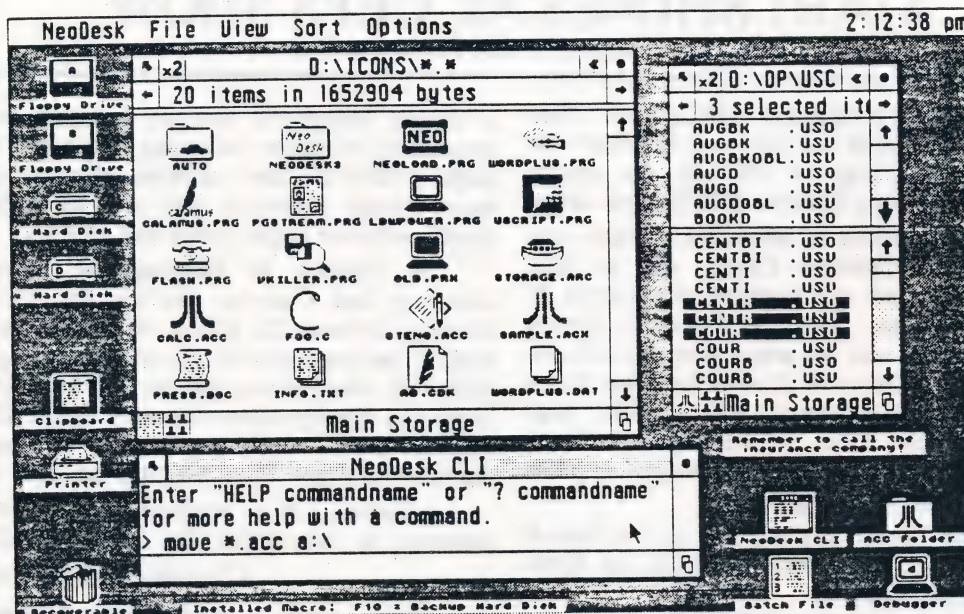
ROVAC Industries, Inc.
P.O. Box 59, Middlesex, NJ 08846

Publisher.....Ron Kovacs
Editor.....John Nagy
Advertising.....John King Tarpinian

Z*Net BBS.....(908)968-8148
GEnie.....Z-NET
CompuServe.....71777,2140

NeoDesk™ 3

The Ultimate Desktop



NeoDesk™ 3 is a complete replacement of the boring, built-in desktop that comes with the Atari ST. Its advanced, yet intuitive, graphical interface will make your computer both easier to use and much more powerful.

It is the easiest and most affordable way to realize your Atari's true potential. Many have called it "the ultimate upgrade for the Atari ST".

NeoDesk introduced the idea of placing your commonly used programs directly on the desktop while pioneering the concept of assigning different custom icons for individual files and folders.

Now NeoDesk 3 takes you a step further, introducing several new and original concepts which will make you want to scream "I want my NeoDesk 3!"

In addition to keeping commonly used files and programs on the desktop, you can now also keep folders on the desktop. And not to limit your creativity, with NeoDesk 3 you can even write *Desktop Notes*™ right on the desktop itself.

Only NeoDesk 3 allows you to look at two different parts of the same window, thanks to its amazing *Split Window* feature. Of course, each window can be set to display text or icons, independently of any other window. Each window can even have its own sorting and text options.

NeoDesk is also smart, using all of its available memory for file copying so that as many files and folders that will fit into memory are read in at once. No more useless disk swaps, even hard drives benefit from its speed and efficiency.

Add some of the other NeoDesk 3 features, such as a brand new Icon Editor, keyboard equivalents, desktop picture, file templates, *Active Icons*, and *Hot Keys* (execute your favorite program with a single key), then you have more than enough reasons to buy NeoDesk. But for those of you who need a little more, read on.

NeoDesk 3 now offers a unique *File Clipboard*™ which lets you temporarily hold files and folders in memory while you are busy doing other things. In a way, you can think of it as an automatically expanding and shrinking ramdisk.

You now also have the power of *Macros*, with which you can automate any series of desktop operations like opening windows, copying files, running programs, etc. These can also have *Hot Keys* assigned to them.

NeoDesk 3 even has special support for 5 1/4" floppy drives and formats all disks with the correct information so they work on most MS-DOS computers.

From low resolution to ultra high resolution, NeoDesk 3 supports up to 10 different resolutions in each system.

Of course, these features would not be useful unless they were easy to use. Rest assured, NeoDesk 3 has been designed to be "upwardly compatible". Use NeoDesk just like you used the original desktop, no need to forget all that you have learned.

It doesn't stop there. The included *Recoverable Trashcan* lets you recover files deleted with it at any time in the future. It was created using the *NeoDesk Developer's Kit*, which opens a whole new world of possibilities. There's also the *NeoDesk CLI* (both available separately), a complete window based command line interpreter which allows you to create pop-up menus, automate file operations, and much more.

No matter who you are, NeoDesk 3 has something for you. From helpful search capabilities to a powerful file reorder function. Thanks to its ability to remove itself from memory, it only needs about 35K of memory. Of course, there's lots more, which you can discover by ordering today!

NeoDesk 3 and the NeoDesk CLI are available from your local dealer, or order toll free by calling (800) 284-GRIB and get FREE 2nd Day Air (US only). Call or write for upgrade and other information.

GRIBNIF SOFTWARE

P.O. Box 350 • Hadley, MA 01035
Tel: (413) 584-7887 • Fax: (413) 584-2565

NeoDesk, Desktop Notes, and File Clipboard are trademarks of Gribnif Software



Z*Net Newswire...



⇒ The Atari Corporation reported at the Hannover CeBit 1991 show that the turnover for the fourth quarter 1990 was 151.9 million dollars with a net income of 8.8 million dollars. The sales for the financial year 1990, which ended on December 31, 1990, were 411.5 million dollars, a decrease of 3 percent compared to the same period in the previous year. The net income for 1990 was 14.9 million dollars against 4.0 million dollars for 1989. Sales dropped by 11 percent in the fourth quarter of 1990 compared to the same quarter of the previous year. Meanwhile, Atari's Entertainment Division reported that February was the best sales month ever for its color portable video game system, the Atari Lynx, topping sales for the entire fourth quarter of 1990. In January, Atari dropped the price of the basic Lynx system from \$179 to \$99 and offered a \$149 package that includes the Lynx, AC adaptor, a ComLynx cable for multiple player games, a California Games four-in-one game cartridge and a coupon for a free game cartridge. Nearly half of the Lynx systems sold in February were for the \$149 package.

⇒ Atari is planning to set up a huge multi-million dollar factory to build computers in Israel, according to the Israeli Trade and Industry Ministry. Investment costs are expected to total 150 million dollars, which will be shared by Atari and the Israeli government. The factory will initially create 600 jobs, mostly for engineers and could rise to 1,000 in five years with an annual turnover of 150 million dollars.

⇒ Atari Canada has revealed the Mega 1 STE, a cut-down version of the Mega 4 STE. The Mega 1 was said

to be the exact same as its big brother minus the hard drive, host adapter, math chip, and 3 megs of ram, but is not as announced. The Mega 1 STE has a new hard drive cover that is louvered as to inhibit the installation of a hard drive.

The cover was completely redesigned in comparison with the Mega 4 STE, with no mounting holes, and louvers that will have to be cut out to allow a hard drive to fit. Additionally, the mounting holes that were on the Mega 4 STE are missing on the Mega 1 STE. Atari originally stated that the ICD Mega host adapter could be purchased and a hard drive added in. Now, Atari says there will be an upgrade offered from them with either a 40 or 80 megabyte drive, host adapter, mounting rails and of course the new (old) cover. No cost comparisons were available at press time.

⇒ Atari Canada will once again be attending the E.C.O.O. (Educational Computing Organization of Ontario) conference being held this year in conjunction with I.C.T.E. (International Conference of Technical Education) at Toronto's Harbour Castle Western, May 7-9. Last year, Atari Canada had its MS-DOS compatible platform recognized by the Ontario's educational purchasers which led to many large sales to schools in the educational market. This year Atari plans to solidify this decision by demonstrating two classroom networking systems. One planned network is for the PC platform and one for the ST/TT platform. Ontario regulations stipulate that a computer purchased for educational purchases must be networkable.

⇒ The MEGAFILE name will be dropped, eventually. A

German company was using it before Atari. Shown at CeBIT was an "AtariFile 200", a new hard drive in the old Mega standard case. The new technology BIG hard drives will replace the smaller ones quite quickly. It was mentioned that the TT will likely be available with up to a 1.2 GIGABYTE internal drive, ideal for UNIX users that really eat storage space.

⇒ Last month, Z*Net reported that Darek Mihocka, of BRASOFT software, was working on his GEMULATOR ST emulation card for the IBM computers. Darek contacted us to say that he has devised a way to proceed on the project without waiting for WINDOWS to release a 32 bit version. He also corrected our report that QUICKTOS is a program designed to dump TOS ROMS to disk - it does exactly the opposite, it allows use of TOS on a disk to be easily loaded into an ST for use instead of the built-in ROMS.

⇒ Double-Click has released DC Shower, a replacement for the GEM desktop SHOW FILE function. It has up to seven DC Shower modules for use in a desk accessory or as an alternative to the standard SHOW routines. They let you view text files, binary files, 17 different picture formats, and (even extract) ARC, LZH, ZIP and ZOO archives. \$29.95, or for a limited time for \$19.95 as an "upgrade" from the shareware version 1.0 or 1.1, available on many BBS services. Double Click Software, PO BOX 741206, Houston, TX 77274 (713) 977-6520

⇒ CALASSISTANT, an online help accessory for use with CALAMUS DTP software, is a new release of Spar Systems. Using a desk-

accessory approach to provide Hypertext-like interface, CalAssistant offers "tear off" style menus leading to text, icons, and pictures giving instruction and tips for using Calamus features. Two meg of memory and a hard drive are recommended for simultaneous Calamus and CalAssistant usage. Tutorial files, utilities and fonts are also included in the \$34.95 package. Spar Systems, 381 Autumn Avenue, Brooklyn, NY 11208, (718) 325-3169.

⇒ Widgets by Decker is offering a solution to the fan noise, heat, and power consumption wasted by the Atari SLM804 laser printer when not in use. The printer must be on for the computer to operate, even when not printing. The "PHANTOM OF THE LASER" kit allows the SLM804 to remain off till you really need it to print. The "PHANTOM" is installed inside the interface box permanently, and should be installed by experienced technicians. \$25.00 (\$40 installed by Decker), WIDGETS BY DECKER, 2399 SW Palisades Crest Drive, Lake Oswego, OR. 97034, 503-638-3940.

⇒ KeySkins are custom made clear keyboard protective covers that stay attached to the keyboard while you type. Made of SOFT ultra-clear plastic, these tape on protectors will keep dust, hair and even liquid spills from damaging your keyboard. Atari KeySkins are available for the 520/1040 ST/STe, Mega ST2/4, and Portfolio. The retail price is \$25.95, but only \$19.95 plus \$2.00 S/H through ST publications. Tell us you read about KeySkins here in Z*Net, and we'll pay the shipping/handling.

Continued...



...Z*Net Newswire



Computer Supply House-BBS Ad, 1112 Second Street, Kenai, AK 99611-7210, Phone: 907-283-5837.

⇒ The U.S. District Court for the Northern District of California has granted Nintendo a preliminary injunction against Atari Games Corp. (not part of Atari Computer) and Tengen Inc. The ruling will prohibit Atari from continuing to market cartridges for the Nintendo Entertainment System. The Court's order prohibits Atari from copying, selling, or using in any way, Nintendo's copyrighted computer program, which Atari has incorporated into its unauthorized NES-compatible cartridges. This injunction is the latest round in over two years of litigation between Nintendo and Atari. Nintendo has charged in this litigation, among other things, that Atari fraudulently obtained a copy of Nintendo's computer program through deliberate lies to the U.S. Copyright Office, and the Court agreed, and ordered a recall of all infringing product. Tengen cartridges affected by the ruling, including Pac Man and RBI Baseball, create about \$40 million a year in business, Atari Games spokesman David Ellis said. Atari will appeal.

⇒ Nintendo has agreed to give up to \$25 million in coupons to customers and pay \$5 million to settle charges that it fixed its prices. Nintendo did not admit to the charges, but agreed to partially refund people who bought its 8-bit Nintendo Entertainment System video game consoles for \$99.95 from June 1988 to December 1990. Every purchaser of an NES console during the 30-month period is entitled to a \$5 coupon, good on the purchase

of a Nintendo game cartridge. Under the proposed consent agreement, Nintendo has agreed to refrain from: Fixing the price at which any dealer advertises or sells Nintendo products to consumers, reducing the supply of Nintendo products to dealers because of failure to adhere to prices, and asking dealers to report other dealers who offer products below resale prices suggested by Nintendo.

⇒ In other Nintendo news, Lewis Galoob Toys announced that the U.S. District Court for the Northern District of California has ordered Nintendo to post a \$15 million bond to cover lost profits or damages Galoob Toys may have incurred if it is found that the company was wrongfully enjoined from selling its new Game Genie video-game enhancer.

⇒ Verbum announced the mid-April availability of "Verbum Interactive 1.0," a CD magazine which features a showcase of animation and interactive multimedia works, interactive columns and feature stories, with music from popular musicians Todd Rundgren and Graham Nash, and several recognized electronic music composers. The 2-disc "Verbum Interactive" edition requires a CD-ROM player and a Macintosh II color computer, and sells for \$49.95. Verbum will launch a regular quarterly subscription service to the magazine in early 1992, for both Macintosh and MS-DOS/Windows systems. For more information contact, Verbum (619) 233-9977.

⇒ Commodore has now introduced their CDTV player, an Interactive Multimedia product that combines audio, video, graphics and text into one component. Available at audio/video retail chains in

Los Angeles, San Jose, Calif., San Francisco, Sacramento, Calif., and Chicago in April, it will be followed by New York, Boston, Minneapolis, Atlanta, Dallas and Denver in May. The CDTV player, which resembles a conventional audio compact disc player, connects to a television set and home audio system to become an interactive education, information and entertainment center. A simple hand-held infrared remote control provides access to an entire library of multimedia educational, entertainment, information and reference titles. During the introductory, 50 CDTV multimedia titles will be available, with more than a hundred planned. The CDTV library will consist of titles developed by leading entertainment and reference companies including Grolier, Guinness, Disney Software and LucasFilm.

⇒ Purchasers of The Poquet PC (similar to but much more expensive than the Atari Portfolio) will receive a free copy of Lotus 1-2-3 (release 2.2) for The Poquet PC. The software bundle applies to all merchandise purchased through Poquet dealers from April 15 to June 30. The Poquet PC is a one-pound, portable personal computer powered by two AA-size alkaline batteries and has a suggested retail price of \$1,450.

⇒ IBM announced that it would reduce its total work force by 14,000 in 1991. IBM's current work force amounts to about 373,000 people worldwide, including about 206,000 people in the United States. It is the first time the company is proposing to include its overseas staff in a major work force reduction plan. IBM, suffering from sagging business, unfavorable

exchange rates and a new accounting charge, announced a first-quarter net loss of \$1.73 billion, the first-ever quarterly shortfall for the world's largest computer maker. IBM was founded in 1911 as the Computing Tabulating Recording Company, and changed its name to IBM in 1924.

⇒ Apple announced in April that unit shipments of its Macintosh personal computer grew by approximately 85 percent in its second fiscal quarter, compared to the same quarter last year. Net revenues increased by 19 percent. Apple's net revenues for the quarter grew to \$1.598 billion, compared to \$1.346 billion in the year ago period. International revenues accounted for 52 percent of total revenues, compared to 47 percent during the second quarter of fiscal 1990. Nevertheless, Mac penetration in all of Europe (4% of the marketplace) is a distant fourth place to IBM (16%), Atari (8%), and Amiga (8%).

⇒ Apple Computer is offering a card for their new modular MAC machines that will give Apple II compatibility. The Apple II card has a suggested retail price of \$199 and takes full advantage of the Macintosh LC computer's peripherals, including the monitor, keyboard, floppy drive and mouse. The new card comes with 128K (RAM) and can use up to 1MB of the Macintosh LC personal computer's RAM. The card also features a floppy disk drive controller and connector ports, allowing customers to connect to a 5.25-inch floppy disk drive and an Apple joystick.

**Call the Z*Net BBS -
908-968-8148**

learning curve is too steep. I found SL more intuitive, and generally easier to use, although old Calamus hands will slip it on like a comfortable shoe. One of Calamus' strong suits has been the manipulation of text around irregular objects, and SL continues this tradition by allowing text and graphics to be rotated through a full 360 degrees.

Stealing CEPS attendees from the Xerox (Ventura Publisher) folks in the adjoining booth were Soft-Logik, with a preliminary version of PageStream 2. I was assured that PageStream 2 will be out "real soon now" for all of you devoted fans that are chomping at the bit.

PageStream 2 includes new support for Adobe Type I, AGFA Compugraphic Intellifont industry standards, as well as the PageStream fonts that you are familiar with. PageStream 2 now includes 18 free outline fonts (10 of which are Compugraphic hinted fonts) as well as the ability to use any Adobe PostScript font.

Additional flexibility has been added to PageStream 2 with the support for additional graphics formats such as IBM, Mac and EPSF EPS. The internal drawing tools have been improved dramatically as well, but are still no substitute for a good drawing program. Those of you who have complained in the past about available page sizes can take comfort in PageStream 2's new 1200 foot by 1200 foot page size "limitation".

A very enthusiastic group of young Europeans representing 3K-ComputerBild drew crowds all day to see Retouche Professional, a full featured photo retouching program. The interesting thing about Retouche is that the "tools" used are designed to be familiar to those in the lithography trade: Pen, brush, charcoal, stamp, copy pen, randomizer, sharpener, finger, water, eraser, scraper and an undo function called the "restorator". Retouche uses screen resolutions of up to 394 lines versus the 133 line limitation in PostScript.

An impressive feature of Retouche is the ability to distort, project, or transform halftone pictures on 3-dimensional Bezier surfaces. A sophisticated "mask" tool used to select areas of the image combines with professional level overlay techniques, such as addition, subtraction, mean value, and evaluation, to produce virtually any type of picture combination.

Virtual memory management enables Retouche Professional to simultaneously handle up to ten pictures of up to 4096 by 4096 pixels (16mb RAM required).

Retouche CD adds the dimension of color. It enables all of the features and functions to allow processing of full color as well as halftone images. Retouche CD can work with 256 colors from a palette of 16.7 million colors and includes facilities for color selection, correction, and color separation for output to an imagesetter.

3K also showed a prototype of their "Image Speeder" which will be a re-packaging of the TT030 specifically designed to connect to an imagesetter. It uses the TT VME

bus to synchronize to the video port of the imagesetter. It also contains some special hardware to assist the software RIP in the Didot, Retouche Professional, and Calamus line of products.

The Image Speeder is packaged in a tower case to accommodate a larger power supply and other peripherals such as a large capacity hard disk, as well as the laser printer controller. Special raster image processor hardware includes an Intel 82786 graphics coprocessor capable of throughput of 50mb/second. The 82786 is equipped with 4mb of RAM and has subunits for a display processor for 1 to 8 bit pixels which display up to 256 colors from a palette of 16.7 million. Monochrome operations can run as fast as 30 million pixels per second; halftones or 256 colors can run at 4 million pixels per second. The graphics processor provides hardware pan and zoom support.

Sherlock Professional is a high speed and highly accurate program for optical character recognition that can process up to 12,00 characters per minute. The program automatically recognizes different languages, recognizes multiple fonts and point sizes on a single page, can be "taught" to recognize special characters, and has a built-in spelling checker.

Local CRAG usergroup member Randy Noak spent quite a bit of time showing me SciGraph by SciLab. It is a high performance integrated graphing and full featured vector drawing program that can display and manipulate up to 256 on screen colors or gray scale levels and create a wide variety of chart and graph types that can easily be converted into desktop publishing documents.

I found SciGraph's 3-D graphics manipulation functions to be particularly innovative. You have full control over the casting of shadows, and their intensity, the perspective of the graph in relation to the viewer, and other bits that can be played with almost infinitely. Randy and I spent the better part of an hour making hundreds of variations on just one set of 3-D data points.

In addition to hosting the 3K products that they will distribute in the USA, Goldleaf Publishing was proudly showing Wordflair II, their integrated document processor.

One of the more fascinating offerings was presented by TradeIT of Germany. Repro Studio Pro and Avant Vektor products spoke for themselves. Repro Studio allows the hand scanner owner functions that were previously reserved for those well-heeled folks owning flatbed scanners. If you don't already have a hand-scanner, TradeIT offers several based on Logitech engines compatible with the ST/TT.

Overall, it was a pleasure to see Atari making a firm commitment to their Professional Systems Group. The caption on the cover of the handouts was: "Complete Publishing Solutions. No compromises", it is my opinion that Atari put everyone else attending CEPS on notice that they intend to be a player in the DTP market, and that they intend to do it through innovation, not "me-too-ism".



AdSpeed ST

ICD reaffirms its position as the leading developer of third party hardware for the Atari ST with the introduction of *AdSpeed ST*, a full featured low-cost 16 megahertz 68000 accelerator for all Atari ST, Mega, and ST^E* computers.

Almost every operation of your computer will be performed faster.

AdSpeed ST continues ICD's tradition of providing the best product available. These are some of the features that set it apart from the competition.

- Works with all ST models, from the 520 ST to the Mega 4, ST^E, and Stacy.
- No mouse, I/O, or blitter conflicts.
- No jumper wires.
- Software selectable true 68000 8 MHz mode for 100% compatibility. Switches speeds on the fly without rebooting the computer!
- 32 kilobytes of high speed static RAM for 16K of data/instruction cache and 16K of cache tag memory.
- Full read and write-through caching for maximum speed.
- State of the art multilayer, surface mount design makes AdSpeed ST the smallest accelerator available anywhere.
- Support for 16 MHz high speed ROM access.
- ICD's famous quality, dependability, and support.

AdSpeed ST is the most effective way to increase the overall speed of your Atari computer. You'll be amazed at the increase in your computer's performance and *your* productivity.



ICD, Incorporated
1220 Rock Street
Rockford, IL 61102
(815) 968-2228 Information
(800) 373-7700 Orders
(815) 968-6888 FAX

* ST^E installation requires optional adapter

AdSpeed is a trademark of ICD, Inc. Atari, ST, Mega, ST^E, and Stacy are trademarks or registered trademarks of Atari Corp.

Alwin Stumpf and Richard Miller: Exclusive Interview!

Courtesy of Germany's PD JOURNAL MAGAZINE

[Translated by Kevin Festner for Z*NET]

During CeBit 91, we had the opportunity to talk with Alwin Stumpf, Managing Director of Atari Germany and President of Atari Worldwide Sales and Marketing, and Richard Miller, Chief of Research & Development with Atari USA.

PD JOURNAL: A question on your role at Atari, Mr Stumpf. In the last few months there has been some confusion concerning your area of responsibility. What is it all about?

Alwin Stumpf: My range of responsibility concerns all of Atari's divisions, including the U.S. That means my role in the U.S. is practically the same as in Holland, Austria, or Germany. The section heads report to me.

PD: What is the policy at Atari concerning video games, particularly with the Lynx?

AS: There is a another Lynx model that differs merely in the design from the current model. CeBit is not a forum for this product, and because of that, we displayed only a few for entertainment. A renaissance has taken place in video games. In the last year, in Germany alone, we have sold 250,000 video games, without expending a lot of effort. It wouldn't be prudent to abandon this market.

PD: Will Atari distinguish itself from its video game line, and like Commodore, show and sell them separately?

AS: We're divided on that already, the funds and sales are divided.

PD: How do you evaluate the market for Windows in the U.S.? Due to its cryptic user interface, DOS machines up to now posed no direct competition for the ST. Microsoft has really pushed Windows. 20 million packages have been sold and of course, this speaks for itself. Does Windows pose any threat for Atari?

AS: I can't assess it at this time. In fact, I have the feeling, this competition will stimulate business, as so frequently happens. We are not the only ones employing a graphical user interface. The desktop is becoming a standard and due to this it might make selling a bit easier.

PD: What's the story on the Portfolio? At the press conference we learned that a RAM extension, for example, would be very expensive, bringing the Portfolio into the price range of the Notebook. Do I understand that the originally planned redesign will not be carried out?

AS: In this respect the market has changed a little, as you approach the price of the Notebook. And the Portfolio as a laptop computer does not make any more sense. Atari prefers to approach this market from above, so to speak.

PD: And that's the key concept here. To what extent will the hardware have similarities to the current ST?

Richard Miller: The ST-Book will embody two custom chips already used in the STE. In addition, we will be installing a lot of new hardware in both new models. About 30 discreet CMOS chips will use special 'Power Management' allowing the optimal use of battery capacity. We will also equip the existing production models with these discrete chips, since they have less power consumption than newer chips. We're talking about micro-amps. The power consumption of a CMOS chip in standby-mode amounts to perhaps 10 micro-amps. That corresponds to two electrons per second.

PD: What does that have to do with pseudo-static RAM?

RM: Pseudo-static RAM is primarily dynamic RAM with some intelligent logic chips added. Addressing is carried out in parallel and is not normally multiplexed. And because of that, the chip has more pins than dynamic RAM. In addressing a specific point in memory, fewer parts of the chips are activated than with dynamic RAM. In concrete terms that means that in a 16 bit data bus, only two pseudo-static RAM chips with an 8 bit bus must be addressed, and with dynamic RAM 4 or 16 chips must be addressed. Furthermore pseudo-static RAM has a self-refresh mode without necessitating an external refresh. In this mode pseudo-static RAM needs about ten times as much current as static RAM and the contents in memory can be stored over months.

PD: The external storage card in the ST Pad is certainly interesting news. Who will offer the cards and at what price?

RM: The specifications for this card and especially for the 68 pin mechanical connector comes from a firm by the name of JEIDA and has already become standardized. These cards come equipped with static RAM and can offer a storage capacity of up to 4 MBytes. Principly, they can be equipped with any type storage, even with ROM, so that a complete application can be offered. There are about eight suppliers of such cards and the price will certainly fall to such an extent that I really don't want to speculate on the cost. In addition, these card can not only be fitted with memory. I know a company who offers a modem on this type of card. That means there is a complete system bus on the connector.

PD: At first report the ST Pad will not be offered with a hard-drive. Is this decision final?

RM: Hard drives are very sensitive at the moment. The head flies over the surface of the platter at a distance of a few microns. Anytime such a mechanical contrivance is used there is a high risk of damage. We need to look around more for a hard drive to equip the ST Pad which can offer a certain level of reliability. But I'm not convinced whether the ST Pad requires a hard drive. The use we have envisioned for the ST Pad is that it can manage well without a hard drive. I'm more interested in offering a radio modem and a hard drive, which can send data over packet radio. Atari is working with other firms on the development of such a modem.

PD: Do you think it will be possible to equip it with such a modem, especially in Germany?

RM: That will certainly be difficult. In the U.S., the FCC. reserves certain frequencies for such uses. Radio modems can be purchased, for example, from Motorola. The German Postal Service is the big problem here.

PD: Finally a question on which we really don't expect an answer. At the press conference last night, there was a question from the audience regarding the Multi-tasking TOS. Leonard Tramiel and you, Mr. Miller, responded by smiling. What should we read from this smile?

AS: It has never been a secret that Atari is moving towards multi-tasking. We have entered into discussions with major software firms in Dusseldorf on this subject. And in time we will be working on it. And with every new TOS version, an upgrade to multitasking TOS will be possible.

PD: Can we count on this TOS being ready for release sometime this year?

AS: Perhaps.

\$29.95

NEW!

Quick ST 3

Software Screen Accelerator and Desktop Customizer

MAXIMUM SPEED FOR YOUR ST OR TT!

- Speeds up most ST software by speeding up screen graphics
- Text, GEM graphics, and GDOS fonts all redraw significantly faster
- Compatible with all ST, STE, and TT computers
- Supports all screen resolutions, including Monitem and ISAC
- Fastest version ever! Even the "fast" TT speeds up considerably
- Easy to use! Install it in the AUTO folder or run it from the desktop
- Requires 20K to 40K of RAM (depends on the configuration)
- Includes the Quick Index 3 benchmarking utility
- Include the MonSTer high resolution screen emulator
- Install any DEGAS Neochrome or Prism Paint picture on the desktop
- Change the desktop font and icons with our font and icon editor
- Install a different font and picture for every program!

Accelerate...

Benchmark...

Customize...

**...any ST or TT
for only \$29.95.**

(Before June 31 1991)

**Upgrade from:
Quick ST II \$15
or Turbo ST \$20
(with proof of purchase)**

Don't settle for imitations. Only Quick ST 3 speeds up all screen resolutions on all monitors.

Branch Always Software
14150 N.E. 20th. St. #302
Bellevue, WA 98007
Phone: (206)-885-5893

Quick ST 3 will be available at Atari ST dealers across the U.S. and Canada in July 1991 at a price of \$34.95 U.S.

Write for our free newsletter!

Order Quick ST 3 before June 31 at an introductory price of only \$29.95 U.S. Product shipment starts June 17, 1991.

THE PACIFIC NORTHWEST

ATARI

Festival

RICHMOND, B.C. CANADA

JUNE 15-16

10:AM-6:PM

\$5.00

Look who's coming!

- ◆ Atari Canada
- ◆ Bob Brodie (Atari U.S.)
- ◆ Gadgets by Small
- ◆ Gribnif Software
- ◆ Codehead Software
- ◆ ISD Marketing
- ◆ SoftLogik Corp.
- ◆ Branch Always Software
- ◆ ICD Inc.
- ◆ Maxwell CPU
- ◆ DreamPark Developments
- ◆ Steinberg Jones
(to name but a few)

Care to join them?

STEVESTON SENIOR SECONDARY SCHOOL
10440 #2 ROAD, RICHMOND, B.C. CANADA
(ONLY 10 MINUTES SOUTH OF VANCOUVER)

THIS AD IS COMPRISED
STRICTLY OF CHERRY FONTS!

EXHIBITOR INQUIRIES:
604/275-7944

Software Spectrum

386 Somerset Street
North Plainfield, New Jersey
07060

Telephone: (908) 561-8777

Hours: Monday through Saturday
10:00 am to 7:00 pm

closed Sundays

ATARI software and hardware at competitive prices.
Accessories and IBM software and hardware also available.

Many items sale priced - discount to JACG members.

JACG INC.
Jersey Atari Computer Group Inc.
P.O. Box 5206
Newark, NJ 07105-0206

0205 09/30/91

JACG NEWSLETTER

JACG Membership Application

DUES U.S. 1st Class Mailing, Canada, Mexico \$25.00
U.S. 1st Class Mailing, Foreign Subscriptions \$31.00

— Renew — New — Former
— 8-bit — 5T/Mega

Name: _____

Address: _____

City: _____

State/Country/Zipcode: _____

Home Phone Number: _____

Date: _____ 1st Class: _____ 3rd Class: _____

Mail to: JACG Membership Chairman
P.O. Box 5206 Newark, NJ 07105-0206

Executive Committee

Joe Kennedy PRESIDENT
126 Jupiter St. Clark, NJ 07066 (908)-388-6717

John H. Dean ST LIBRARIAN
RFD #2 Box 788 Sussex, NJ 07461 (201)-827-3902

Gary J. Gorski SECRETARY & MEMBERSHIP
313 Sheridan Ave Roselle, NJ 07203 (908)-241-4554

Jack Rutt TREASURER
52 Decolan Avenue Rockaway, NJ 07886 (201)-625-0273

David Arrington VICE-PRESIDENT 8BIT AND EDITOR
Eagle Rock Village Bldg 8 Apt 38 Budd Lake, NJ 07828 (201)-347-5227

Sam Cory LIBRARIAN
P.O. Box 368 Blairstown, NJ 07825 (201)-362-5474

David B. Noyes 16 BIT VICE PRESIDENT AND ADVERTISING
3 Ann Road Long Valley, NJ 07853 (201)-852-3165

Gary J. Gorski SALES
313 Sheridan Avenue Roselle, NJ 07203 (908)-241-4554

David B. Noyes PRESIDENT EMERITUS
3 Ann Road Long Valley, NJ 07853 (201)-852-3165
Bill Garmany, Jr. MAIL ORDER LIBRARIAN
13 Wellington Livingston, NJ 07039

ASSISTANT LIBRARIANS
[8-Bit] Dave Green, Bill Garmany Jr., Neil Van Oort Jr.
[5T] Peter Rotton, John Dean

BULLETIN BOARD SYSTEM OPERATORS
Gary Gorski, Joseph Kennedy, Mark Rotton

JACG BIG BROTHER
Charles J. Miller - (908)-469-6190
JACG SBS - (908)-220-0161

**Support Your Club and
Get Something of Value
at the Same Time**

Advertising Rates

Full Page (7.5" x 9") \$48.00

Half Page \$25.00

Quarter Page \$13.00

Discount Rates Available on Request

The Jersey Atari Computer Group Inc. (JACG) is an independent, informal organization of Atari computer users. It is not affiliated with Atari Corporation or any other commercial enterprise. Opinions expressed in this publication reflect only the views of the individual author, and do not necessarily represent the views of the JACG. Material in this Newsletter may be reprinted by other Atari Users Groups, provided the author (if applicable) and the JACG are given credit. Only original work may be reprinted. Questions concerning reprinting should be addressed to the Editor.